

REMARKS

Claims 1-24 are pending in the Application, and all have been rejected in the Office action mailed February 23, 2007. Claim 1 is amended by this response. Claims 1, 12 and 21-24 are independent claims. Claims 2-11 and 13-20 depend, respectively, from independent claims 1 and 12.

The Applicant respectfully requests reconsideration of the pending claims 1-24, in light of the following remarks.

Rejection of Claims

Rejections Under 35 U.S.C. §102

Claims 1-2, 5-7, 12, 19 and 21-24 were rejected under 35 U.S.C. §102(e) as being anticipated by Ayres et al. (U.S. 6,389,592, hereinafter "Ayres"). The Applicant respectfully traverses the rejection. Notwithstanding, Applicant has amended claim 1 to clarify the subject matter of the claim.

With regard to the anticipation rejections, MPEP 2131 states, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 2 USPQ2d 1051, 1053 (Fed.Cir. 1987). MPEP 2131 also states, "[t]he identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

With regard to amended claim 1, the Applicant respectfully submits that Ayres does not appear to teach, suggest or disclose, for example, a method for updating software in an electronic device, the method comprising generating an update package for updating at least one software application, the update package being generated based upon at least one reference software installed on the electronic device; updating the at least one software application using the update package and the reference

software; and wherein the updating leaves the at least one reference software unchanged.

More specifically, Applicant respectfully submits that Ayres does not appear to teach or suggest, at least, "...wherein the updating leaves the at least one reference software unchanged...." Applicant respectfully submits that the Office action has failed to specifically identify the teachings of Ayres that correspond to the elements of Applicant's claim 1. Based upon the cited portions of Ayres, Applicant assumes that the Office action is suggesting that the "delta file" of Ayres corresponds to the "update package" of Applicant's claim 1, and that the "first version" or "original class file" of Ayres corresponds to the "at least one reference software" of Applicant's claim 1. Applicant respectfully requests that the next Office action clearly and specifically identify the corresponding elements if Applicant's assumptions are erroneous. Applicant respectfully submits that Ayres states, at column 2, line 6 to column 3, line 4:

"On the client machine, the delta file is downloaded rather than the new version of the class. Then the original class file is 'flattened', the delta commands are applied and the resulting file is 'unflattened' again producing a Java class file identical to the new version on the server in a greatly reduced overall time.
(underline added)

Ayres also states, at column 3, lines 32-36:

"The clients original class file corresponding to the source code of FIG. 1 is then flattened and broken into a text file as shown in FIG. 2. The delta file is then applied to the flattened file of FIG. 2, to change the original flattened file to the new one in one step..."
(underline added)

The above portions of Ayres clearly disclose that the updating "flattens" the "original class file", applies delta commands to the flattened file, and "unflattens" the resulting file. Applicant respectfully submits that the "original class file" has, therefore, been changed by the updating. Applicant respectfully submits, therefore, that Ayres does not appear to teach "...wherein the updating leaves the at least one reference software unchanged ...", as recited in Applicant's amended claim 1.

Based at least upon the above, the Applicant respectfully submits that Ayres does not appear to teach all of the elements of Applicant's claim 1, as required by MPEP §2131, that Ayres fails to anticipate Applicant's claim 1, and that the rejection of claim 1 under 35 U.S.C. §102(e) cannot be maintained.

Therefore, Applicant believes that amended claim 1 is allowable over Ayres, for at least the reasons set forth above. Applicant respectfully submits that claims 2-11 depend either directly or indirectly from allowable claim 1. Because claims 2-11 depend from claim 1, Applicant respectfully submits that claims 2-11 are allowable as well, for at least the same reasons. Therefore, Applicant respectfully requests that the rejection of claims 1-2 and 5-7 under 35 U.S.C. §102(e) be withdrawn.

With regard to claim 12, the Applicant respectfully submits that Ayres does not appear to teach, suggest or disclose, for example, a system for updating software, the system comprising an electronic device capable of having software installed thereon; a software delivery device for receiving and installing a reference software to the electronic device if the electronic device does not have the reference software previously installed; and the software delivery device receiving and delivering at least one update package to the electronic device, wherein the reference software facilitates, using the at least one update package, at least one update to application software installed on the electronic device.

More specifically, Applicant respectfully submits that Ayres does not appear to teach or suggest, at least, "...a software delivery device for receiving and installing a reference software to the electronic device if the electronic device does not have the reference software previously installed;...." The Office action alleges that Ayres

discloses "...a software delivery device for receiving and installing a reference software (Col. 1, Lines 48-50 – a delta file; Col. 1, Lines 62 through Col. 2, Line 7; Fig. 4; Col. 2, Lines 25-26; Col. 2, Lines 46-52; Col. 2, Line 62 through Col. 3, Lines 4; Col. 3, Lines 59-64) to the electronic device if the electronic device does not have the reference software previously installed." (Office action, page 3, lines 3-7) Applicant respectfully disagrees with what the Ayres reference allegedly teaches.

Applicant respectfully submits that Ayres states, at column 1, lines 46-58:

"Accordingly, the present invention provides a method for updating a first version of installed application files to a second version, said method comprising the steps of: responsive to receiving a delta file defining the changes between a file in said first version and a corresponding file in said second version, transforming said first version of said file into a first transformed image comprising a series of records; applying the changes contained in said delta file to selected records of said first transformed image to generate a transformed image of said second version; and reversing the transformation on the transformed image of said second version to generate said second version of said file on said client computer."

(underline added)

Ayres also states, at column 1, line 60 through column 2, line 7:

"Whereas prior art techniques chunked updates at a whole class level when most version to version migrations involve a small percentage of change in the code base, the method according to the invention makes optimum use of already installed application objects on the client computer thus greatly reducing the amount of data necessary to download or transfer.

The downloaded data is the minimum necessary delta file between the two class versions down to, for example, the Java Virtual Machine opcode level--this is likely to be much smaller than previous compression mechanisms and provides a useful improvement in download time/bandwidth use especially with the emergence of non-trivial Internet applications (eg. Component Broker Java Objects, Enterprise Java Beans.)”
(underline added)

Fig. 4 of Ayres simply shows the text:

15c
9 bipush 10

At column 2, lines 25-26, Ayres simply states:

“FIG. 4 shows a delta file generated for the files of FIGS. 1 and 3.”

At column 2, lines 46-53, Ayres recites:

“The two `flattened` classes are then compared using tools such as text comparison tools, for example, the UNIX “diff” command.

These tools (such as diff using the switch “-e”) construct a delta file between two test files rapidly and output the delta information, preferably, in the form of batch editor commands, FIG. 4, that can be used to construct the new version of the text file, FIG. 3, from the original, FIG. 1.”

At column 2, lines 62 to column 3, line 4, Ayres states:

“This delta class file of FIG. 4 is stored in the server to be pulled by the client (or possibly `pushed` to subscribed clients).

On the client machine, the delta file is downloaded rather than the new version of the class. Then the original class file is `flattened`, the delta commands are applied and the resulting file is `unflattened` again producing a Java class file identical to the new version on the server in a greatly reduced overall time.”
(underline added)

At column 3, lines 59-64, Ayres states:

“It should also be seen that a commercial embodiment would have not need to make the flattened file of FIG. 2 so human readable so each class file byte code could be represented by a more compressed code rather than the code's `name` (eg bipush)—so each delta line would be even smaller than the example above.”

The Applicant respectfully submits that the above collection of various portions of the Ayres reference, specifically identified in the Office action as teaching “...a software delivery device for receiving and installing a reference software to the electronic device if the electronic device does not have the reference software previously installed;...” do not appear to teach anything with respect to a software delivery device for receiving and installing an original class file, and make no mention of any check if the electronic device does not have an original class file previously loaded, in accordance with Applicant's claim 12. Applicant respectfully submits that Ayres does not appear to teach anything regarding the installation of software that is not previously loaded. In fact, the underlined portions of the cited text from Ayres clearly states that “...the present invention provides a method for updating a first version of installed application files....”

Ayres also specifically states "...the invention makes optimum use of already installed application objects...." Applicant respectfully submits that Ayres does not appear to address anything with respect to installation of software not previously loaded or of checking whether software is loaded, in accordance with Applicant's claim 12.

Based at least upon the above, the Applicant respectfully submits that Ayres fails to teach all of the elements of Applicant's claim 12, as required by MPEP §2131, that Ayres fails to anticipate Applicant's claim 12, and that the rejection of claim 12 under 35 U.S.C. §102(e) cannot be maintained.

Therefore, Applicant believes that amended claim 12 is allowable over Ayres, for at least the reasons set forth above. Applicant respectfully submits that claims 13-20 depend either directly or indirectly from allowable claim 12. Because claims 13-20 depend from claim 12, Applicant respectfully submits that claims 13-20 are allowable as well, for at least the same reasons. Therefore, Applicant respectfully requests that the rejection of claims 12 and 19 under 35 U.S.C. §102(e) be withdrawn.

With regard to claims 21-24, the Applicant respectfully submits that Ayres does not appear to teach, suggest or disclose, for example, "...generating a third update package for updating the at least one software application, the third update package being generated based upon difference information between the first and second update packages...", as recited in Applicant's claims 21, 22; and "...a second update package generator for generating update packages based upon difference information between different update packages...", as recited in Applicant's claims 23 and 24.

With respect to claims 21 and 22, the Office action alleges that Ayres teaches "...generating a third update package (Col. 1 Lines 50-54; Col. 2, Lines 53-56) for updating the at least one software application, the third update package being generated based upon difference information (Col. 1, Lines 48-50) between the first and second update packages; and updating the at least one software application (Col. 1, Lines 54-57) using the third update package." (Office action, page 3, line 20 to page 4, line 5; page 4, lines 16-19) Applicant respectfully disagrees.

Ayres states, at column 1, lines 46-58:

“Accordingly, the present invention provides a method for updating a first version of installed application files to a second version, said method comprising the steps of: responsive to receiving a delta file defining the changes between a file in said first version and a corresponding file in said second version, transforming said first version of said file into a first transformed image comprising a series of records; applying the changes contained in said delta file to selected records of said first transformed image to generate a transformed image of said second version; and reversing the transformation on the transformed image of said second version to generate said second version of said file on said client computer.”

Ayres also states, at column 2, lines 50-62:

“These tools (such as diff using the switch “-e”) construct a delta file between two test files rapidly and output the delta information, preferably, in the form of batch editor commands, FIG. 4, that can be used to construct the new version of the text file, FIG. 3, from the original, FIG. 1.

Typically the delta file containing such editor commands is an order of magnitude smaller than the whole of the updated class file for a typical software version to version migration. Whereas conventional updates are ‘chunked’ at the class level, with the present embodiment only the actual bytecodes that have been changed (plus a few other key bytes in the class file) need be communicated--the smallest possible chunks.”

As discussed above with respect to claim 1, Applicant assumes that the Office action suggests correspondence between the term “delta file” used by Ayres and the limitation “update package” of Applicant’s claims. Based upon that assumption,

Applicant respectfully submits that the portions of the Ayres reference shown above, that include the text specifically cited in the Office action as teaching "...generating a third update package for updating the at least one software application, the third update package being generated based upon difference information between the first and second update packages...", do not appear to teach anything with respect to generating a third delta file for updating at least one software application, the third delta file being generated based upon difference information between first and second delta files, in accordance with Applicant's claims 21 and 22. Ayres does not appear to teach generating difference information from different versions of difference information.

Based at least upon the above, the Applicant respectfully submits that Ayres does not appear to teach all of the elements of Applicant's claims 21 and 22, as required by MPEP §2131, that Ayres fails to anticipate Applicant's claims 21 and 22, and that the rejections of claims 21 and 22 under 35 U.S.C. §102(e) cannot be maintained.

Therefore, Applicant believes that claims 21 and 22 are allowable over Ayres, for at least the reasons set forth above. Accordingly, Applicant respectfully requests that the rejections of claims 21 and 22 under 35 U.S.C. §102(e) be withdrawn.

With respect to claims 23 and 24, the Office action alleges that Ayres teaches "...a second update package generator for generating update packages (Col. 1, lines 50-54; col. 2, lines 53-56) based upon difference information (col. 1, lines 48-50) between different update packages;..." (Office action, page 5, lines 5-8; page 5, lines 16-19) Applicant respectfully disagrees.

As previously discussed, Applicant assumes that the Office action suggests correspondence between the term "delta file" used by Ayres and the limitation "update package" of Applicant's claims. Based upon that assumption and for at least the reasons set forth above with regard to claims 21 and 22, Applicant respectfully submits that the portions of the Ayres reference shown above, that include the text specifically cited in the Office action as teaching "...a second update package generator for generating update packages based upon difference information between different

update packages...", do not appear to teach anything with respect to a delta file generator for generating delta files based upon difference information between different delta files, in accordance with Applicant's claims 23 and 24.

Based at least upon the above, the Applicant respectfully submits that Ayres does not appear to teach all of the elements of Applicant's claims 23 and 24, as required by MPEP §2131, that Ayres fails to anticipate Applicant's claims 23 and 24, and that the rejections of claims 23 and 24 under 35 U.S.C. §102(e) cannot be maintained.

Therefore, Applicant believes that claims 23 and 24 are allowable over Ayres, for at least the reasons set forth above. Accordingly, Applicant respectfully requests that the rejections of claims 23 and 24 under 35 U.S.C. §102(e) be withdrawn.

Rejections Under 35 U.S.C. §103

Claims 3-4, 8-11, 13-18 and 20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ayres in view of P.J. O'Neill (US 2004/0215755). The Applicant respectfully traverses the rejection.

The Applicant respectfully submits that the Examiner has failed to establish a case of prima facie obviousness for at least the reasons provided below. M.P.E.P. §2142 clearly states that "[t]he examiner bears the initial burden of factually supporting any prima facie conclusion of obviousness." The M.P.E.P. §2142 goes on to state that "[t]o establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure."

Applicant respectfully submits that, in accordance with 35 U.S.C. 103(c), O'Neill is not a valid reference in the rejection of claims 3-4, 8-11, 13-18 and 20

under 35 U.S.C. 103(a), because the present application and O'Neill (U.S. Patent Application Ser No. 10/404,601 which published as U.S. Patent Application Publication No. 2004/0215755 A1, now U.S. Patent No. 6,832,373) were, at the time the invention was made, owned by, or under a common obligation to assign ownership to, Bitfone Corporation, now a wholly-owned subsidiary of Hewlett-Packard Development Corporation, LLC.

In addition, Applicant respectfully submits that claims 3-4 and 8-11 depend from allowable independent claim 1, and that claims 13-18 and 20 depend from allowable independent claim 12, and are therefore allowable over O'Neill, for at least the reasons set forth above with respect to claims 1 and 12.

Based at least upon the above, Applicant respectfully submits that the Office has failed to establish a prima facie case of obviousness, as required by M.P.E.P. §2142, and that the above rejection of claims 3-4, 8-11, 13-18 and 20 under 35 U.S.C. §103(a) cannot stand.

Applicant believes, therefore, that claims 3-4, 8-11, 13-18 and 20 are allowable, for at least the reasons set forth above, and respectfully requests that the rejection of claims 3-4, 8-11, 13-18 and 20 under 35 U.S.C. §103(a), be withdrawn.

Conclusion

In general, the Office Action makes various statements regarding claims 1-24 and the cited references that are now moot in light of the above. Thus, Applicant will not address such statements at the present time. However, Applicant expressly reserve the right to challenge such statements in the future should the need arise (e.g., if such statements should become relevant by appearing in a rejection of any current or future claim).

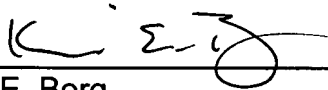
The Applicant believes that all of pending claims 1-24 are in condition for allowance. Should the Examiner disagree or have any questions regarding this submission, the Applicant invites the Examiner to telephone the undersigned at (312) 775-8000.

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A Notice of Allowability is courteously solicited.

Respectfully submitted,

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